MASTER SPECIFICATIONS

Carey BUILT-UP ROOFS

BONDED 5·10·20 YEARS

Carey BUILT-UP ROOFING

AT the request of hundreds of architects we have condensed the various types of CAREY BUILT-UP ROOFING SPECIFICATIONS in such a manner as to enable us to reproduce every type of roof construction in a complete, comprehensive manner in this issue of SWEET'S ARCHITECTURAL CATALOGUES.

Every essential type of built-up roof construction, with definite recommendations as to the service adaptability of each, is incorporated in CAREY'S TWELVE (12) MASTER BUILT-UP ROOFING SPECIFICATIONS. In specifying any one of the twelve Master Specifications the architect should always indicate, in addition to the Master Built-up Roofing Specification number, the type of roof construction desired, i.e., Types A, B, C or D. He should also indicate any special conditions listed under "General Requirements Applying to All Types," such as: bond period, deck treatment, requirements for steep deck application and roof surfacing, etc., applying to the particular job.

Note: *When application is to be over wood or gypsum decks select deck treatment in accordance with type of deck.*

The minimum requirements for every item entering into the construction of Carey Built-up Roofs are well known, nationally accepted standards, re-enforced with a definite tolerance in quality. These standards of quality are established, controlled, and maintained by Carey engineers, research laboratories, and extensive modern factory facilities.

Architects may specify the types of Carey Roofs described in this catalogue with confidence, for use on all standard types of deck construction, and they are invited to correspond with the Engineering Department of THE PHILIP CAREY COMPANY for recommendations as to the roofing or waterproofing construction especially adapted to special types of deck construction or special specifications to meet unusual service conditions.

The specifications cover the following types of construction:

SLAG OR GRAVEL SURFACED ROOFS

Ten (10) and twenty (20)-year roof construction for application over all types of decks. Various types comprise:

Asphalt Saturated Rag Felt construction, slag or gravel surfaced.

Tar Saturated Rag Felt construction, slag or gravel surfaced.

Combination Asphalt Impregnated Asbestos and Asphalt Saturated Rag Felt construction, slag or gravel surfaced.

MINERAL SURFACED ROOFS

Ten (10) and twenty (20)-year roof construction for application over all types of decks. Various types comprise:

Asphalt Saturated Rag Felt construction, mineral surfaced.

Combination Asphalt Impregnated Asbestos and Asphalt Saturated Rag Felt construction, mineral surfaced.

Asphalt Impregnated Asbestos Felt construction, mineral surfaced.

ASPHALT SURFACED ROOFS

Ten (10) and twenty (20)-year roof construction for application over all types of decks. Various types comprise:

Asphalt Impregnated Asbestos Felt construction, asphalt surfaced.

Asphalt Saturated Rag Felt construction, asphalt surfaced.

Combination Asphalt Impregnated Asbestos and Asphalt Saturated Rag Felt construction, asphalt surfaced.

The recommendations governing the adaptability of each type and the application details incorporated in each type of built-up roof are the results of over half a century of manufacturing and application experience and are given in the hope that architects will carefully consider the wisdom of each recommendation.

Permanent satisfaction in built-up roof construction can only be assured when the proper type is selected to meet existing service conditions. Three vital points to be carefully considered when specifying various types of roofs are:

(1) Incline in roof deck and type of roof deck.

(2) Climatic conditions affecting the geographic location of the job.

(3) Presence of industrial gases and fumes detrimental to certain types of roof construction.

THE PHILIP CAREY COMPANY

GENERAL OFFICES AND MAIN FACTORY: LOCKLAND, OHIO
OTHER FACTORIES: FRANKLIN, OHIO; ST. LOUIS, MISSOURI; and PLYMOUTH MEETING, PA.

ASBESTOS MINES: EAST BROUGHTON, QUEBEC
BRANCHES AND DISTRIBUTERS IN ALL PRINCIPAL CITIES

For Carey Shingles and Pipe Coverings, see File Index

CAREY FELT (FELTEX)

The Carey Felt (Feltex) furnished for use in Carey Built-up Roofing Specifications is manufactured on the highest grade rag felt base and saturated with an asphalt developed especially for roofing purposes by our research laboratory and processed in our own plant. The saturant used in Carey Felt (Feltex) is of such a nature that it allows the felt to be handled as easily in cold weather as in summertime.

Carey Felt (Feltex) is 36 ins. wide, packaged in rolls containing four squares or 432 sq. ft. per roll, weight per 100 sq. ft., 15 lbs., weight per roll, approximately 65 lbs.

CAREY FIBEROCK

Carey Fiberock as manufactured for use in Carey Built-up Roofing Specifications consists of an asbestos felt that contains 85% asbestos fibers held together with a combining material and impregnated with a high grade asphalt saturant developed and processed in our own laboratories and plant. There are two weights of Carey Fiberock. The 15-lb. Fiberock is impregnated with asphalt only, while the 20-lb. Fiberock is impregnated and coated one side with asphalt. Both weights are packaged in 3 square rolls containing 324 sq. ft. per roll, 36 ins. wide. The 15-lb. weighs 45 lbs. per roll and the 20-lb., 60 lbs. per roll.

CAREY-SEAL TAR FELT

Carey-Seal Tar Felt as furnished for use in Carey Built-up Roofing Specifications is manufactured on a high grade rag felt base and saturated with a tar pitch saturant developed for this purpose. Carey-Seal Tar Felt is 32 ins. wide packaged in rolls containing 4 squares or 432 sq. ft. per roll; weight per 100 sq. ft., 15 lbs.; weight per roll, approximately 65 lbs.

CAREY ASBESTOS FELT

The Carey Asbestos Felt Base Sheets furnished for use in Carey Asbestos Specification Roofs are made on an asbestos felt base of the best quality. This asbestos base is impregnated with asphalt and then coated and sanded on both sides. The saturant developed for this particular purpose and the coating asphalt is likewise an asphalt processed for coating purposes only, and thereby seals the base sheet against all attacks of moisture.

Carey Asbestos Felt Base Sheets are packaged in two weights, 45 lbs. and 60 lbs. and are put up in one square rolls containing 108 sq. ft., the roll weight being approximately 48 lbs. for the 45-lb. sheet and approximately 65 lbs. for the 60-lb. sheet.

CAREY ASPHALT

The Carey Roofing Asphalt furnished for application of Carey Specification Roofs is an asphalt blended in such a way that it contains all properties necessary to give long life and durability to the roof. Carey Asphalt contains practically no impurities and is 99.5% soluble in carbon disulphide. Carey Asphalt is packaged in open head drums containing approximately 400 lbs. per drum.

CAREY-SEAL TAR PITCH

The Carey-Seal Tar Pitch furnished for application of Carey Tar Pitch Specification Roofs is a high grade coal tar pitch developed for use in constructing tar or gravel roofs. This material has unusual waterproofing qualities and, therefore, tends to form the basis for a serviceable and durable roof. Carey-Seal Tar Pitch is packaged in drums containing approximately 500 lbs. per drum.

THE *Carey* ROOFINDER *Index*

DECK	BOND	INCLINE in. per ft.	SURFACE	SECTION of U. S.	SPEC. NO.	PAGE NO.	UNDERWRITERS RATING
WOOD or GYPSUM	20-YEAR	Level-2" 2"-6" Level-¾"	Slag or Gravel	All	1	4	Class A
		¾"-6"	Asphalt	North, East and All	9	12	Class A or C
		¾"-6"	Mineral	All	5	8	Class C
	10-YEAR	Level-2" 2"-6" Level-¾"	Slag or Gravel	All	2	5	Class A
		¾"-6"	Asphalt	North, East and All	10	13	Class A or C
		¾"-6"	Mineral	All	6	9	Class C
CONCRETE or STEEL	20-YEAR	Level-1½" 1½"-6" Level-¾"	Slag or Gravel	All	3	6	Class A
		¾"-1½"	Asphalt	North, East and All	11	15	Class A or C
		¾"-1½"	Mineral	All	8	11	Class C
	10-YEAR	Level-1½" 1½"-6" Level-¾"	Slag or Gravel	All	4	7	Class A
		¾"-1½"	Asphalt	North, East and All	12	16	Class A or C
		¾"-1½"	Mineral	All	7	10	Class C

NUMBER

1

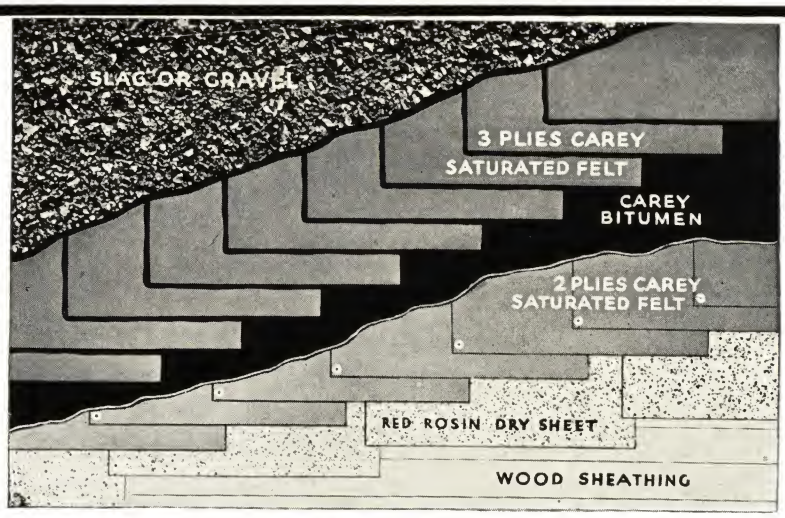
Bond: 20-Year

DECK • WOOD or PRECAST GYPSUM

INCLINES • LEVEL-2 IN. per Foot
2 IN. to 6 IN. per Foot

CONSTRUCTION • ASPHALT or TAR

SURFACE • SLAG or GRAVEL



Carey 20-Year Master Built-up Roofing Specification No. 1

TWO OPTIONAL TYPES • and the Service Adaptability of Each

TYPE	Sections of U. S.	Deck Slope, inches to one foot	Acid Fumes		Underwriters Laboratories Rating	Number of Layers and Type of Felt	Type of Mopping	Weight, lbs. per ply of Felt per square	Weight, lbs. Asphalt or Tar per square	Weight, lbs. of Slag per square	Weight, lbs. of Gravel per square
			Rec.	Not Rec.							
A	All	Level to 2 2"-6"	.....	X	Class A	5 Plies Carey Feltex (Asphalt Saturated Rag Felt)	Carey Asphalt	15	135	300	400
B	All	Level to 3/4	.....	X	Class A	5 Plies Carey-Seal Tarred Felt (Tar Saturated Rag Felt)	Carey-Seal Tar Pitch	15	150	300	400

DECK SURFACES

Before the Built-up Roofing Specification is applied the deck shall be covered with a layer of Red Rosin Sized Sheathing weighing not less than 5 lbs. per 100 sq. ft., same to be lapped approximately 2 ins. and secured to the deck by occasional nailing.

Nails to be used in securing the Built-up Roofing Specification in the manner described under "Application" shall be either 1-in. roofing nails driven through flat tin caps, or 1-in. "Simplex" nails.

APPLICATION

TYPE A—Specification No. 1

Five plies of CAREY FELTEX (Asphalt Saturated Rag Felt), each ply weighing approximately 15 lbs. per 100 sq. ft., and not less than 135 lbs. of CAREY ASPHALT and 300 lbs. of Slag or 400 lbs. of Gravel shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 1—Type A.

The felts used in the construction of the roof shall be 36 ins. wide. The first two sheets shall be laid dry, lapped 19 ins., leaving 17 ins. exposed, and be secured to the deck by occasional nailing. To the surface thus provided a mopping of asphalt shall be applied into which, while hot, shall be embedded three sheets of felt, each sheet to overlap the previous sheet 25 ins., leaving 11 ins. exposed. Solid moppings of Asphalt shall be applied between the plies of this three-ply construction so that at no point shall felt touch felt.

To the top surface of this construction a flood coat of hot Asphalt shall be poured from a dipper and not less than 50 lbs. shall be used to cover 100 sq. ft. of roof surface. Into this top flood coat of Asphalt, while hot, Slag or Gravel shall be embedded. Asphalt shall not be heated over 400° F.

Application of Specification No. 1—Type A on Incline of 2 In. to 6 In. Per Foot (Asphalt Construction Only)

In applying this specification on wood or precast gypsum decks having a slope greater than 2 in. per foot and not exceeding 6 in. per foot, the top three plies shall be nailed at a point 6 in. from the back edge of each sheet as same is embedded in the hot asphalt. Nails to be spaced on approximately 8-in. centers and felt to be laid at right angles to the slope of the roof.

Carey Steep Roofing Asphalt shall be used throughout.

TYPE B—Specification No. 1

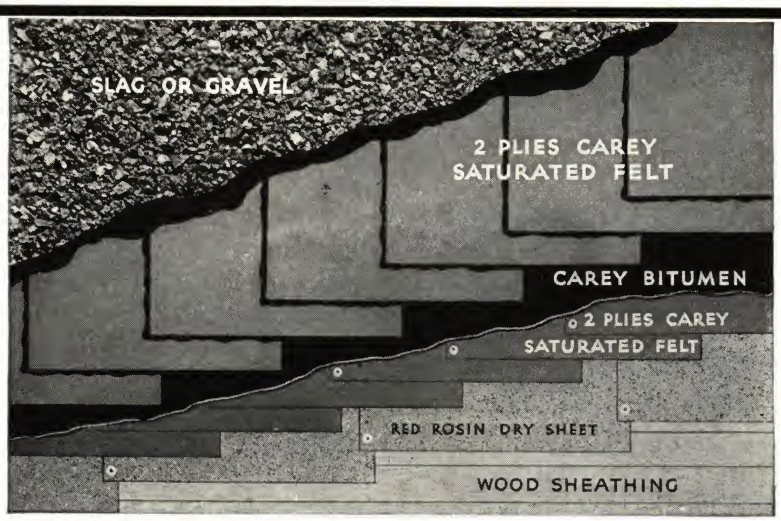
Five plies of CAREY-SEAL TARRED FELT (Tar Saturated Rag Felt), each ply weighing approximately 15 lbs. per 100 sq. ft., and not less than 150 lbs. of CAREY-SEAL TAR PITCH and 300 lbs. of Slag or 400 lbs. of Gravel shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 1—Type B.

The felts used in the construction of this roof shall be 32 ins. wide. The first two sheets shall be laid dry, lapped 17 ins., leaving 15 ins. exposed, and be secured to the deck by occasional nailing. To the surface thus provided a mopping of Tar Pitch shall be applied into which, while hot, shall be embedded three sheets of felt, each sheet to overlap the previous sheet 22 ins., leaving 10 ins. exposed. Solid moppings of Tar Pitch shall be applied between the plies of this three-ply construction so that at no point shall felt touch felt.

To the top surface of this construction a flood coat of hot Tar Pitch shall be poured from a dipper and not less than 60 lbs. shall be used to cover 100 sq. ft. of roof surface. Into this top flood coat of Tar Pitch, while hot, Slag or Gravel shall be embedded. Tar Pitch shall not be heated over 400° F.

BOND CLAUSE

The roofing contractor shall furnish THE PHILIP CAREY MANUFACTURING COMPANY'S 10-Year Surety Bond covering both material and workmanship used in the construction of this roof, when same is applied strictly according to above specifications by a Carey Approved Roofer.



Carey 10-Year Master Built-up Roofing Specification No. 2

NUMBER **2**

Bond · 10-Year

DECK • WOOD or PRECAST GYPSUM

INCLINE • LEVEL-2 IN. per foot
2 IN. to 6 IN. per foot

CONSTRUCTION • ASPHALT or TAR

SURFACE • SLAG or GRAVEL

TWO OPTIONAL TYPES • and the Service Adaptability of Each

TYPE	Sections of U. S.	Deck Slope, inches to one foot	Acid Fumes		Underwriters Laboratories Rating	Number of Layers and Type of Felt	Type of Mopping	Weight, lbs. per ply of Felt per square	Weight, lbs. Asphalt or Tar per square	Weight, lbs. of Slag per square	Weight, lbs. of Gravel per squa
			Rec.	Not Rec.							
A	All	Level to 2 2 - 6	.....	X	Class A	4 Plies Carey Feltex (Asphalt Saturated Rag Felt)	Carey Asphalt	15	100	300	400
B	All	Level to ¾	.....	X	Class A	4 Plies Carey-Seal Tarred Felt (Tar Saturated Rag Felt)	Carey-Seal Tar Pitch	15	125	300	400

DECK SURFACES

Before the Built-up Roofing Specification is applied the deck shall be covered with a layer of Red Rosin Sized Sheathing, weighing not less than 5 lbs. per square, same to be lapped approximately 2 ins. and secured to the deck by occasional nailing.

Nails to be used in securing the Built-up Roofing Specification in the manner described under "Application" shall be either 1-in. roofing nails driven through flat tin caps or 1-in. "Simplex" nails.

APPLICATION

TYPE A—Specification No. 2

Four plies of CAREY FELTEX (Asphalt Saturated Rag Felt), each ply weighing approximately 15 lbs. per 100 sq. ft., and not less than 100 lbs. of CAREY ASPHALT and 300 lbs. of Slag or 400 lbs. of Gravel shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 2—Type A.

The Feltex used in the construction of this roof shall be 36 ins. wide. The first two sheets shall be laid dry, lapped 19 ins., leaving 17 ins. exposed, and be secured to the deck by occasional nailing. To the surface thus provided a solid mopping of Asphalt shall be applied, into which, while hot, shall be embedded two sheets of felt, each sheet to overlap the previous sheet 19 ins., leaving 17 ins. exposed. Solid moppings of Asphalt shall be applied between the two top plies, so that at no point shall felt touch felt. To the surface thus provided a mopping of Tar Pitch shall be applied into which, while hot, shall be embedded three sheets of felt. To the top surface of this construction a flood coat of Asphalt shall be poured from a dipper and not less than 50 lbs. shall be used to cover 100 sq. ft. of roof surface. Into this top flood coat of Asphalt, while hot, Slag or Gravel shall be embedded. Asphalt shall not be heated over 400° F.

Application of Specification No. 2—Type A on Incline of 2" to 6" per Foot (Asphalt Construction Only)

In applying this specification on wood or pre-cast gypsum decks having a slope greater than 2 ins. per foot and not exceeding 6 ins. per foot, the top two plies shall be nailed at a point 1½ ins. from the back edge of each sheet as same is embedded in the hot asphalt. Nails to be spaced on approximately 8 in. centers and felt to be laid at right angles to the slope of the roof.

Carey Steep Roofing Asphalt shall be used throughout.

TYPE B—Specification No. 2

Four plies of CAREY-SEAL TARRED FELT (Tar Saturated Rag Felt), each ply weighing approximately 15 lbs. per 100 sq. ft., and not less than 125 lbs. of CAREY-SEAL TAR PITCH and 300 lbs. of Slag or 400 lbs. of Gravel shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 2—Type B.

The CAREY-SEAL TARRED FELT used in the construction of this roof shall be 32 ins. wide. The first two sheets shall be laid dry, lapped 17 ins., leaving 15 ins. exposed and secured to the deck by occasional nailing. To the surface thus provided a solid mopping of Tar Pitch shall be applied, into which, while hot, shall be embedded two sheets of felt, each sheet to overlap the previous sheet 17 ins., leaving 15 ins. exposed. Solid moppings of Tar Pitch shall be applied between the two top plies of felt so that at no point shall felt touch felt. To the top surface of this construction a flood coat of Tar Pitch shall be poured from a dipper and not less than 60 lbs. shall be used to cover 100 sq. ft. of roof surface. Into this top flood coat of Tar Pitch, while hot, Slag or Gravel shall be embedded. Tar Pitch shall not be heated over 400° F.

BOND CLAUSE

The roofing contractor shall furnish THE PHILIP CAREY MANUFACTURING COMPANY'S 10-Year Surety Bond covering both material and workmanship used in the construction of this roof, when same is applied strictly according to above specifications by a Carey Approved Roofer.

NUMBER

3

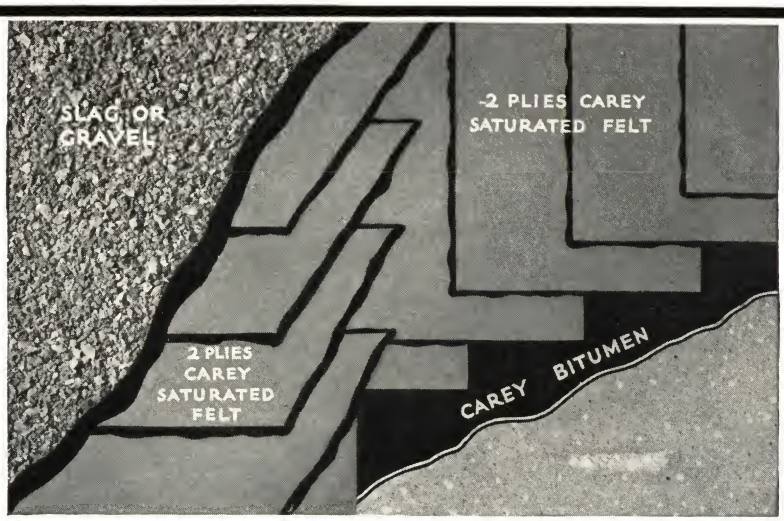
Bond: 20-Year

DECK • CONCRETE STEEL POURED GYPSUM or INSULATED

INCLINE • LEVEL-1½ IN. per Foot 1½ IN. to 6 IN. per Foot

CONSTRUCTION • ASPHALT or TAR

SURFACE • SLAG or GRAVEL



Carey 20-Year Master Built-up Roofing Specification No. 3

TWO OPTIONAL TYPES • and the Service Adaptability of Each

TYPE	Sections of U. S.	Deck Slope, inches to one foot	Acid Fumes		Underwriters Laboratories Rating	Number of Layers and Type of Felt	Type of Mopping	Weight, lbs. per ply of Felt per square	Weight, lbs. Asphalt or Tar per square	Weight, lbs. of Slag per square	Weight, lbs. of Gravel per square
			Rec.	Not Rec.							
A	All	Level to 1½ 1½ - 6	.....	X	Class A	4 Plies Carey Feltex (Asphalt Saturated Rag Felt)	Carey Asphalt	15	175	300	400
B	All	Level to ¾	.....	X	Class A	4 Plies Carey-Seal Tarred Felt (Tar Saturated Rag Felt)	Carey-Seal Tar Pitch	15	190	300	400

DECK SURFACES

Concrete: Before roofing is applied concrete deck must be thoroughly dry and free from frost, loose sand or debris. All low spots or depressions removed to provide satisfactory drainage.

Steel: Before roofing is applied all steel decks must first be covered with a layer of approved roof insulation at least ½-in. thick, said insulation to be bonded to steel deck with hot asphalt.

APPLICATION

TYPE A—Specification No. 3

Four plies of CAREY FELTEX (Asphalt Saturated Rag Felt), each ply weighing approximately 15 lbs. per 100 sq. ft., and not less than 175 lbs. CAREY ASPHALT and 300 lbs. of Slag or 400 lbs. of Gravel shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 3—Type A.

The Feltex used in the construction of this roof shall be 36 ins. wide. The roof surface shall first be mopped with a heavy coat of Asphalt, into which, while hot, two sheets of felt shall be embedded and mopped solid between the sheets with Asphalt, each sheet overlapping the previous sheet 19 ins., leaving 17 ins. exposed. The surface of this two-ply construction shall then be mopped with Asphalt, into which, while hot, two additional sheets of felt shall be applied at right angles to the first two plies, each sheet overlapping the previous sheet 19 ins., leaving 17 ins. exposed. The last two plies shall be bonded together with a solid mopping of Asphalt so that at no point shall felt touch felt. To the top surface of this construction a flood coat of Asphalt shall be poured from a dipper and not less than 50 lbs. shall be used to cover 100 sq. ft. of roof surface. Into this top flood coat of Asphalt, while hot, Slag or Gravel shall be embedded. CAREY ASPHALT used in constructing the roof shall not be heated over 400° F.

Application of Specification 3—Type A on Incline of 1½ In to 6 In. Per Ft. (Asphalt Construction Only)

In applying this specification on a concrete deck having a slope greater than 1½ ins. per foot and not exceeding 6 ins. per foot, wooden nailing strips shall be provided spaced not greater than three feet on centers, if concrete deck will not allow for nailing. Wooden nailing strips, when provided, shall be laid parallel to slope of deck.

All sheets of felt shall be laid at right angles to the slope of deck and each sheet nailed 9 ins. from the back edge with 1 in. roofing nails driven through flat tin caps or 1 in. Simplex Nails, all nails to be spaced on 1 ft. centers.

If wooden nailing strips are provided two nails are to be used at each nailing point, one nail to be 9 ins. from back edge of sheet and one to be 7 ins. from back edge of sheet.

Carey Steep Roofing Asphalt shall be used throughout.

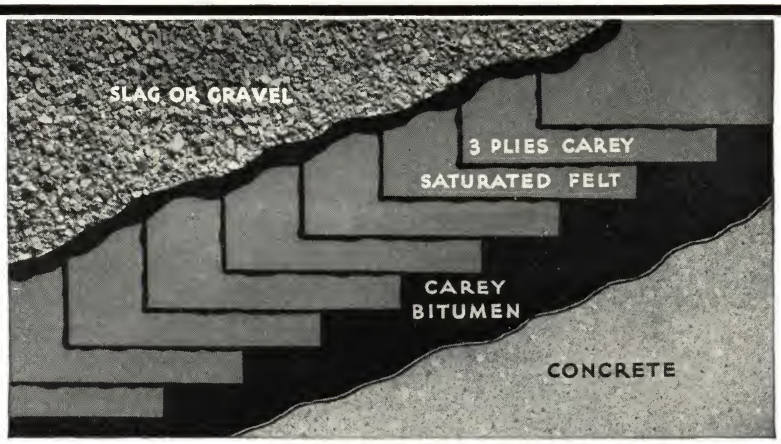
TYPE B—Specification No. 3

Four plies of CAREY-SEAL TARRED FELT (Tar Saturated Rag Felt), each ply weighing approximately 15 lbs. per 100 sq. ft. and not less than 190 lbs. of CAREY-SEAL TAR PITCH and 300 lbs. of Slag or 400 lbs. of Gravel shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 3—Type B.

The CAREY-SEAL TARRED FELT used in the construction of this roof shall be 32 ins. The roof surface shall first be mopped with a heavy coat of Tar Pitch, into which, while hot, two sheets of felt shall be embedded and mopped solid between the sheets with Tar Pitch, each sheet to overlap the previous sheet 17 ins., leaving 15 ins. exposed. The surface of this two-ply construction shall then be mopped with Tar Pitch, into which, while hot, two additional sheets of felt shall be applied at right angles to the first two plies, each sheet overlapping the previous sheet 17 ins., leaving 15 ins. exposed. The last two plies shall be bonded together with a solid mopping of Tar Pitch so that at no point shall felt touch felt. To the top surface of this construction a flood coat of hot Tar Pitch shall be poured from a dipper and not less than 60 lbs. shall be used to cover 100 sq. ft. of roof surface. Into this top flood coat of Tar Pitch, while hot, Slag or Gravel shall be embedded. CAREY-SEAL TAR PITCH used in the construction of this roof shall not be heated over 400° F.

BOND CLAUSE

The roofing contractor shall furnish THE PHILIP CAREY MANUFACTURING COMPANY'S 20-year Surety Bond covering both material and workmanship used in the construction of this roof, when same is applied strictly according to above specifications by a Carey Approved Roofer.



Carey 10-Year Master Built-up Roofing Specification No. 4

NUMBER
4

Bond: 10-Year

DECK • CONCRETE STEEL POURED GYPSUM or INSULATED
INCLINE • LEVEL-1½ IN. per Foot 1½ IN. to 6 IN. per Foot
CONSTRUCTION • ASPHALT or TAR
SURFACE • SLAG or GRAVEL

TWO OPTIONAL TYPES • and the Service Adaptability of Each

TYPE	Sections of U. S.	Deck Slope, inches to one foot	Acid Fumes		Underwriters Laboratories Rating	Number of Layers and Type of Felt	Type of Mopping	Weight, lbs. per ply of Felt per square	Weight, lbs. of Mopping per square	Weight, lbs. of Slag per square	Weight, lbs. of Gravel per square
			Rec.	Not Rec.							
A	All	Level to 1½ 1½-6	.....	X	Class A	3 Plies Carey Feltex (Asphalt Saturated Rag Felt)	Carey Asphalt	15	140	300	400
B	All	Level to ¾	.....	X	Class A	3 Plies Carey-Seal Tarred Felt (Tar Saturated Rag Felt)	Carey-Seal Tar Pitch	15	175	300	400

DECK SURFACES

Concrete: Before roofing is applied concrete deck must be thoroughly dry and free from frost, loose sand or debris. All low spots or depressions removed to provide satisfactory drainage.

Steel: Before roofing is applied all steel decks must first be covered with a layer of approved roof insulation at least ½ in. thick, said insulation to be bonded to steel deck with hot asphalt.

APPLICATION

TYPE A—Specification No. 4

Three plies of CAREY FELTEX (Asphalt Saturated Rag Felt), each ply weighing approximately 15 lbs. per 100 ft., and not less than 140 lbs. CAREY ASPHALT and 300 lbs. of Slag or 400 lbs. of Gravel shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 4—Type A.

The Feltex used in the construction of this roof shall be 36 ins. wide. The roof surface shall first be mopped with a heavy coat of Asphalt, into which, while hot, shall be applied three sheets of felt mopped solid between the sheets so that at no point shall felt touch felt, each sheet to overlap the previous sheet 25 ins., leaving 11 ins. exposed. To the top surface of this construction a flood coat of Asphalt shall be poured from a dipper and not less than 50 lbs. shall be used to cover 100 sq. ft. of roof surface. Into this top flood coat of Asphalt, while hot, Slag or Gravel shall be embedded. CAREY ASPHALT used in the construction of the roof shall not be heated over 400° F.

Application of Specification 4, Type A Incline of 1½ In. to 6 In. per Foot. (Asphalt Construction Only.)

In applying this specification on a concrete deck having a slope greater than 1½ ins. per foot and not exceeding 6 ins. per foot, wooden nailing strips shall be provided spaced not greater than 3 ft. on centers, if concrete deck will not allow for nailing. Wooden nailing strips, when provided, shall be laid parallel to slope of deck.

All sheets of felt shall be laid at right angles to the slope of deck and each sheet nailed 9 ins. from the back edge with 1-in. roofing nails driven through flat tin caps or 1-in. Simplex Nails, all nails to be spaced on 1-ft. centers.

If wooden nailing strips are provided two nails are to be used at each nailing point, one nail to be 9 ins. from back edge of sheet and one to be 7 ins. from back edge of sheet.

Carey Steep Roofing Asphalt shall be used throughout.

TYPE B—Specification No. 4

Three plies of CAREY-SEAL TARRED FELT (Tar Saturated Rag Felt), each ply weighing approximately 15 lbs. per 100 sq. ft., and not less than 175 lbs. of CAREY-SEAL TAR PITCH and 300 lbs. of Slag or 400 lbs. of Gravel shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 4—Type B.

The CAREY-SEAL TARRED FELT used in the construction of this roof shall be 32 ins. wide. The roof surface shall first be mopped with a heavy coat of Tar Pitch, into which, while hot, shall be applied three layers of CAREY-SEAL TARRED FELT mopped solid between the sheets so that at no point shall felt touch felt, each sheet to overlap the previous sheet 22 ins., leaving 10 ins. exposed. To the top surface of this construction a flood coat of CAREY-SEAL TAR PITCH shall be poured from a dipper and not less than 60 lbs. shall be used to cover 100 sq. ft. of roof surface. Into this top flood coat of Tar Pitch, while hot, Slag or Gravel shall be embedded. CAREY-SEAL TAR PITCH used in the construction of the roof shall not be heated over 400° F.

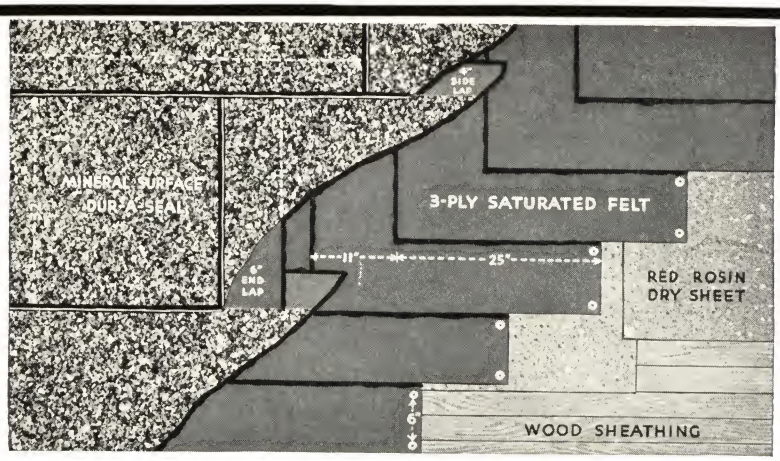
BOND CLAUSE

The roofing contractor shall furnish THE PHILIP CAREY MANUFACTURING COMPANY'S 10-year Surety Bond covering both material and workmanship used in the construction of this roof, when same is applied strictly according to above specifications by a Carey Approved Roofer.

NUMBER

5

Bond: 20-Year



Carey 20-Year Master Built-up Roofing Specification No. 5

DECK • WOOD or PRECAST GYPSUM
INCLINE • ¾-6 IN. per Foot
CONSTRUCTION • ASPHALT
SURFACE • MINERAL CAP SHEET

TYPE "A" • and its Service Adaptability

TYPE	Sections of U. S.	Deck Slope, inches to one foot	Acid Fumes	Underwriters Laboratories Rating	Number of Layers and Type of Felt	Type of Mopping	Weight, lbs. per ply of Felt per square	Weight, lbs. per square Mineral Surfaced Dur-A-Seal	Weight, lbs. per square Asphalt Mopping
A	All	¾ to 6	Not rec.	Class C	3 Plies of Carey Feltex (Asphalt Saturated Rag Felt) 1 Ply Mineral Surfaced Dur-A-Seal (Asphalt Saturated)	Carey Asphalt	15	75	80

DECK SURFACES

The roof deck over which this specification is to be applied shall be dry, free from rubbish and debris and free from objectionable low spots and depressions. Roof must be applied during dry, favorable weather.

Gypsum Decks—When this specification is applied over gypsum decks the length of the nails called for under "Application" shall be 1¾ in. long instead of 1 in. long.

APPLICATION

TYPE A—Specification No. 5

One layer of Red Rosin Sized Sheathing Paper, weighing not less than 5 lbs. per square, three layers of 15 lb. Feltex (Asphalt Saturated Rag Felt), each sheet weighing approximately 15 lbs. per 100 sq. ft., and one sheet of Carey Mineral Surfaced Dur-A-Seal (Rag Felt Base), weighing approximately 75 lbs. per 100 sq. ft., and 80 lbs. of Carey Asphalt shall be used in the construction of Carey Master Built-up Roofing Specification No. 5—Type A.

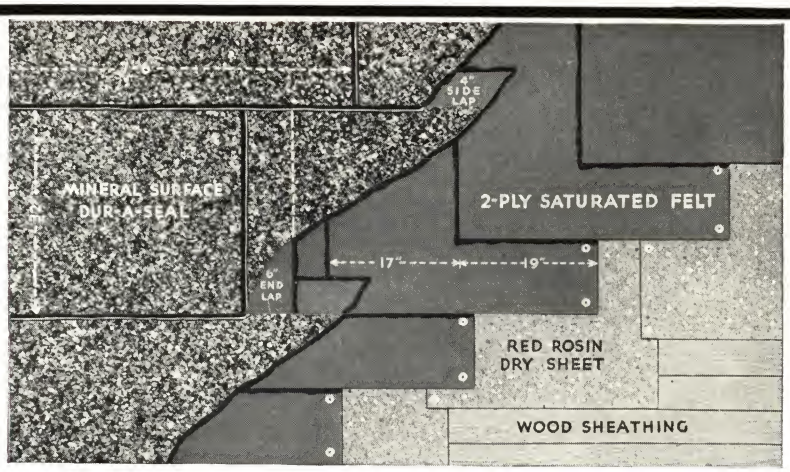
The Dur-A-Seal Cap Sheet and Felt used in the construction of this roof shall be 36 ins. wide. The roof surface shall first be covered with a layer of Red Rosin Sized Sheathing Paper lapped approximately 2 ins. and secured to the deck by occasional nailing. Over this sheet shall then be applied three layers of 15-lb. Feltex, lapping sheets 25 ins., leaving 11 ins. exposed. Sheets shall be mopped solid between the laps with Carey Asphalt and in addition shall be nailed along the edge of the unsecured portion (back nailing method) with 1-in. nails driven through flat tin caps or 1-in. "Simplex" nails, spaced along the laps approximately every 3 ins. To the surface of this three-ply construction a solid mopping of Carey Asphalt shall be applied, into which, while hot, shall be embedded the sheet of Mineral Surfaced Dur-A-Seal (Rag Felt Base), sheets to be applied in approximately 8-ft. lengths and lapped 4 ins. along the longitudinal seams and 6 ins. at the end seams, laps to be sealed with solid moppings of hot Asphalt. Carey Ashalt used in the construction of this roof shall not be heated over 400° F.

STEEP DECK APPLICATION

When Carey Master Built-up Roofing Specification No. 5 is applied over roof decks having an incline of 1 in. in 12 ins. or greater, the cap or top sheet of Carey Mineral Surfaced Dur-A-Seal shall be back-nailed approximately every 6 ins. along the underside of the end lap, and approximately every 12 ins. along the underside of the side lap with 1-in. "Simplex" nails. The top or cap sheet in these instances should always be run parallel with the pitch of the roof and the sheet at the peak or ridge should extend over the ridge at least 12 ins. and be secured to the deck along the opposite slope with "Simplex" nails driven along the end of the sheet. Asphalt used in the construction of this roof when applied over decks having a pitch exceeding 1 in. in 12 ins. shall be Carey Steep Roofing Asphalt.

BOND CLAUSE

The roofing contractor shall furnish The Philip Carey Manufacturing Company's 20-year Surety Bond covering both material and workmanship used in the construction of this roof, when same is applied strictly according to above specifications by a Carey Approved Roofer.



Carey 10-Year Master Built-up Roofing Specification No. 6

Bond: 10-Year

NUMBER 6

DECK • WOOD or PRECAST GYPSUM

INCLINE • ¾-6 IN. per Foot

CONSTRUCTION • ASPHALT

SURFACE • MINERAL CAP SHEET

TYPE "A" • and its Service Adaptability

TYPE	Sections of U. S.	Deck Slope, inches to one foot	Acid Fumes: Rec.	Acid Fumes: Not Rec.	Underwriters Laboratories Rating	Number of Layers and Type of Felt	Type of Mopping	Weight, lbs. per ply of Felt per square	Weight, lbs. per square Mineral Surf. Dur-A-Seal	Weight, lbs. per square Asphalt Mopping
A	All	¾ to 6	.....	X	Class C	2 Plies Carey Feltex (Asphalt Saturated Rag Felt) 1 Ply Mineral Surface Dur-A-Seal (Asphalt Saturated)	Carey Asphalt	15	75	55

DECK SURFACES

The roof deck over which this specification is to be applied shall be dry, free from rubbish and debris and free from objectionable low spots and depressions. Roof must be applied during dry, favorable weather.

Gypsum Decks—When this specification is applied over gypsum decks the length of the nails called for under "Application" shall be 1¾ in. long instead of 1 in. long.

APPLICATION

TYPE A—Specification No. 6

One layer of Red Rosin Sized Sheathing Paper, weighing not less than 5 lbs. per square, two layers of 15-lb. Feltex (Asphalt Saturated Rag Felt), each sheet weighing approximately 15 lbs. per 100 sq. ft., and one sheet of Carey Mineral Surfaced Dur-A-Seal (Rag Felt Base) weighing approximately 75 lbs. per 100 sq. ft., and 55 lbs. of Carey Asphalt shall be used in the construction of Carey Master Built-up Roofing Specification No. 6—Type A.

The Dur-A-Seal Cap Sheet and Felt used in the construction of this roof shall be 36 ins. wide. The roof surface shall first be covered with a layer of Red Rosin Sized Sheathing Paper lapped approximately 2 ins. and secured to the deck by occasional nailing. Over this sheet shall then be applied two layers of 15-lb. Feltex, sheets lapped 19 ins., leaving 17 ins. exposed. Sheets shall be mopped solid between the laps with Carey Asphalt and in addition shall be nailed along the edge of the unsecured portion (back nailing method) with 1-in. nails driven through flat tin caps or 1-in. "Simplex" nails, spaced along the laps approximately every 3 ins. To the surface of this two-ply construction a mopping of Carey Asphalt shall be applied, into which, while hot, shall be embedded the sheet of Mineral Surfaced Dur-A-Seal (Rag Felt Base), sheets to be applied in approximately 8-ft. lengths and lapped 4 ins. along the longitudinal seams and 6 ins. at the end seams, laps to be sealed with solid moppings of hot Asphalt. Carey Asphalt used in the construction of this roof shall not be heated over 400° F.

STEEP DECK APPLICATION

When Carey Master Built-up Roofing Specification No. 6 is applied over roof decks having an incline of 1 in. in 12 ins. or greater, the cap or top sheet of Carey Mineral Surfaced Dur-A-Seal shall be back nailed approximately every 6 ins., along the underside of the end lap and approximately every 12 ins. along the underside of the side lap with 1-in. "Simplex" nails. The top or cap sheet in these instances should always be run parallel with the pitch of the roof and the sheet at the peak or ridge should extend over the ridge at least 12 ins. and be secured to the deck along the opposite slope with "Simplex" nails driven along the end of the sheet. Asphalt used in the construction of this roof when applied over decks having a pitch exceeding 1 in. in 12 ins. shall be Carey Steep Roofing Asphalt.

BOND CLAUSE

The roofing contractor shall furnish The Philip Carey Manufacturing Company's 10-year Surety Bond covering both material and workmanship used in the construction of this roof, when same is applied strictly according to above specifications by a Carey Approved Roofer.

NUMBER

7

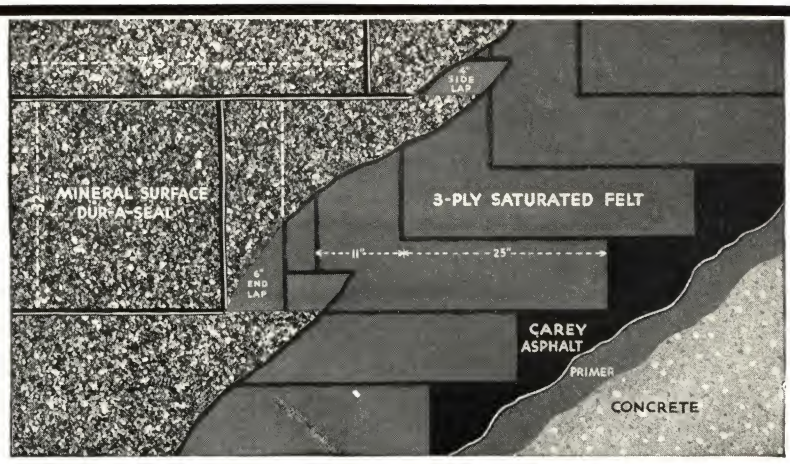
Bond: 20-Year

DECK • CONCRETE STEEL POURED GYPSUM or INSULATED

INCLINE • ¾-1½ IN. per Foot

CONSTRUCTION • ASPHALT

SURFACE • MINERAL CAP SHEET



Carey 20-Year Master Built-up Roofing Specification No. 7

TYPE "A" • and its Service Adaptability

TYPE	Sections of U. S.	Deck Slope, inches to one foot	Acid Fumes		Underwriters Laboratories Rating	Number of Layers and Type of Felt	Type of Mopping	Weight, lbs. per ply of Felt per square	Weight, lbs. per square Mineral Surf. Dur-A-Seal	Weight, lbs. per square Asphalt Mopping
			Rec.	Not Rec.						
A	All	¾ to 1½	.....	X	Class C	3 Plies Carey Feltex (Asphalt Saturated Rag Felt) 1 Ply Mineral Surf. Dur-A-Seal (Asphalt Saturated)	Carey Asphalt	15	75	120

DECK SURFACES

Before Built-up Roofing is applied concrete or gypsum decks must be thoroughly dry with all low spots or depressions removed so that satisfactory drainage to outlets will result. Roof decks shall be free from frost, loose sand or debris and surface of deck shall also be free from laitance and scaling as the result of frozen mix.

Steel—Before roofing is applied all steel decks must first be covered with a layer of approved roof insulation at least ½ in. thick, said insulation to be bonded to steel deck with hot asphalt.

APPLICATION

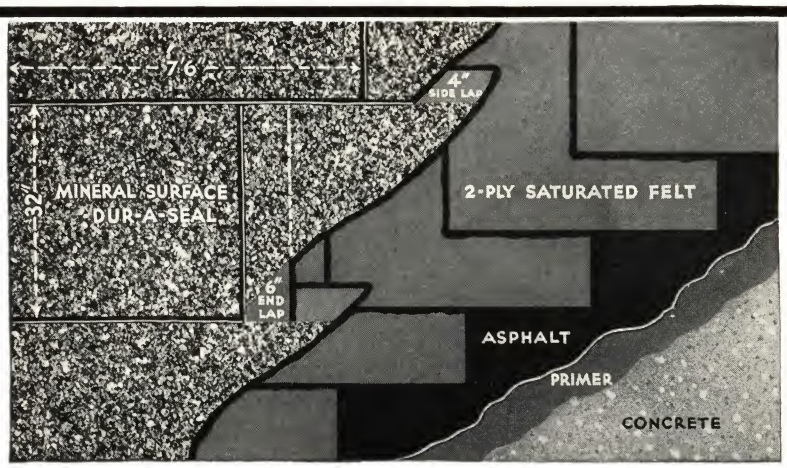
TYPE A—Specification No. 7

One gallon of Asphalt Primer, three layers of 15-lb. Feltex (Asphalt Saturated Rag Felt), each sheet weighing approximately 15 lbs. per 100 sq. ft., and one sheet of Carey Mineral Surfaced Dur-A-Seal (Rag Felt Base), weighing approximately 75 lbs. per 100 sq. ft., and 120 lbs. of Carey Asphalt shall be used in the construction of Carey Master Built-up Roofing Specification No. 7—Type A.

The Dur-A-Seal Cap Sheet and Felt used in the construction of this roof shall be 36 ins. wide. The roof surface shall first be primed with Asphalt Primer to which surface shall be applied a solid mopping of Asphalt into which, while hot, shall be embedded three layers of 15-lb. Feltex, lapping sheets 25 ins., leaving 11 ins. exposed. Sheets shall be mopped solid between the plies with Carey Asphalt. The surface of this three-ply construction shall then be mopped with a solid mopping of Carey Asphalt into which, while hot, shall be embedded the sheet of Mineral Surfaced Dur-A-Seal (Rag Felt Base), sheets to be applied in approximately 8-ft. lengths and lapped 4 ins. along the longitudinal seams and 6 ins. at the end seams. Laps to be sealed with solid moppings of Asphalt. The Asphalt used in the construction of this roof shall not be heated over 400° F.

BOND CLAUSE

The roofing contractor shall furnish The Philip Carey Manufacturing Company's 20-year Surety Bond covering both material and workmanship used in the construction of this roof, when same is applied strictly according to above specifications by a Carey Approved Roofer.



Carey 10-Year Master Built-up Roofing Specification No. 8

NUMBER **8**

Bond: 10-Year

DECK • CONCRETE STEEL POURED GYPSUM or INSULATED
INCLINE • ¾-1½ IN. per Foot
CONSTRUCTION • ASPHALT
SURFACE • MINERAL CAP SHEET

TYPE "A" • and its Service Adaptability

TYPE	Sections of U. S.	Deck Slope, inches to one foot	Acid Fumes		Underwriters Laboratories Rating	Number of Layers and Type of Felt	Type of Mopping	Weight, lbs. per ply of Felt per square	Weight, lbs. per square Mineral Surf. Dur-A-Seal	Weight, lbs. per square Asphalt Mopping
			Rec.	Not Rec.						
A	All	¾ to 1½	.....	X	Class C	2 Plies Carey Feltex (Asphalt Saturated Rag Felt) 1 Ply Mineral Surface Dur-A-Seal (Asphalt Saturated)	Carey Asphalt	15	75	95

DECK SURFACES

Before Built-up Roofing is applied concrete or gypsum decks must be thoroughly dry with all low spots or depressions removed so that satisfactory drainage to outlets will result. Roof decks shall be free from frost, loose sand or debris and surface of deck shall also be free from laitance and scaling as the result of frozen mix.

Steel—Before roofing is applied all steel decks must first be covered with a layer of approved roof insulation at least ½ in. thick, said insulation to be bonded to steel deck with hot asphalt.

APPLICATION

TYPE A—Specification No. 8

One gallon of Asphalt Primer, two layers of 15-lb. Feltex (Asphalt Saturated Rag Felt), each sheet weighing approximately 15 lbs. per 100 sq. ft., and one sheet of Carey Mineral Surfaced Dur-A-Seal (Rag Felt Base), weighing approximately 75 lbs. per 100 sq. ft., and 95 lbs. of Carey Asphalt shall be used in the construction of Carey Master Built-up Roofing Specification No. 8—Type A.

The Dur-A-Seal Cap Sheet and Felt used in the construction of this roof shall be 36 ins. wide. The roof surface shall first be primed with Asphalt Primer to which surface shall be applied a solid mopping of Asphalt into which, while hot, shall be embedded two layers of 15-lb. Feltex, lapping sheets 19 ins., leaving 17 ins. exposed. Sheets shall be mopped solid between the plies with Carey Asphalt. The surface of this two-ply construction shall then be mopped with a solid mopping of Carey Asphalt into which, while hot, shall be embedded the sheet of Mineral Surfaced Dur-A-Seal (Rag Felt Base), sheets to be applied in approximately 8-ft. lengths and lapped 4 ins. along the longitudinal seams and 6 ins. at the end seams. Laps to be sealed with solid moppings of Asphalt. The Asphalt used in the construction of this roof shall not be heated over 400° F.

BOND CLAUSE

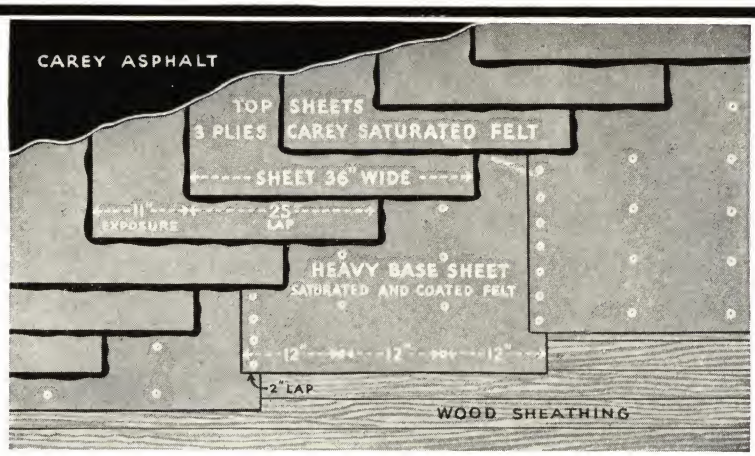
The roofing contractor shall furnish The Philip Carey Manufacturing Company's 10-year Surety Bond covering both material and workmanship used in the construction of this roof, when same is applied strictly according to above specifications by a Carey Approved Roofer.

NUMBER

9

Bond: 20-Year

DECK • WOOD or PRECAST GYPSUM
INCLINE • ¾-6 IN. per Foot
CONSTRUCTION • ASPHALT
SURFACE • ASPHALT



Carey 20-Year Master Built-up Roofing Specification No. 9

TWO OPTIONAL TYPES • and the Service Adaptability of Each

TYPE	Section of U. S.	Deck Slope, inches to one foot	Acid Fumes		Underwriters Laboratories Rating	Number of Layers and Type of Felt	Weight, lbs. per ply Base Sheet	Weight, lbs. per ply Cap Sheets per sq.	Type Mopping	Weight per square Asphalt Mopping
			Rec.	Not Rec.						
A	All	¾ to 6	X	.....	Class A	1 Layer Carey Fiberock Base Sheet (Asphalt Impregnated Asb.) 3 plies Carey Fiberock	60	20	Carey Asphalt	100
C	All	¾ to 6	X	.....	Class C	1 Layer Feltex Base Sheet (Asphalt Sat. Rag Felt) 3 plies Fiberock (Asphalt Sat. Asbestos Felt)	45	20	Carey Asphalt	100

DECK SURFACES

The roof deck over which this specification is to be applied shall be dry, free from rubbish and debris, and free from objectionable low spots and depressions. Roof must be applied during dry, favorable weather.

Gypsum Decks—When this specification is applied over Gypsum Decks, nails called for under "Application," shall be 1¾ ins. long instead of 1 in. long.

APPLICATION

TYPE A—Specification No. 9

One layer of CAREY FIBEROCK ASBESTOS BASE SHEET (Asphalt Impregnated and Coated Asbestos Felt) weighing approximately 60 lbs. per 100 sq. ft., and three plies of CAREY 20-LB. FIBEROCK (Asbestos Felt Impregnated and Coated on one side with Asphalt) each sheet weighing approximately 20 lbs. per 100 sq. ft., and 100 lbs. of CAREY ASPHALT shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 9—Type A.

All felts used in the construction of this roof shall be 36 ins. wide. The roof surface shall first be covered with the 60-lb. Fiberock Base Sheet, lapping all sheets not less than 2 ins. and secured to the deck with 1-in. nails driven through flat tin caps or 1-in. "Simplex" nails, spacing nails along the laps approximately every 4 ins. In addition two rows of nails shall be run parallel to the laps through the center of the sheets, nailing approximately 8 ins. apart and 12 ins. from either edge. To the surface thus provided a solid mopping of CAREY ASPHALT shall be applied into which, while hot, shall be embedded three sheets of 20-lb. Fiberock, Asphalt coated side down, each sheet to overlap previous sheet 25 ins., leaving 11 ins. exposed. Solid moppings of Asphalt shall be applied between the sheets so that at no point shall felt touch felt. The roof surface shall be finished with a uniform coating of hot CAREY ASPHALT. CAREY ASPHALT used in the construction of this roof shall not be heated over 400° F.

TYPE C—Specification No. 9

One layer of CAREY FELTEX BASE SHEET (Asphalt Saturated and Coated Rag Felt), weighing approximately 45 lbs. per 100 sq. ft., and three plies of 20-lb. Fiberock (Asbestos Felt Impregnated and Coated on One Side with Asphalt), each sheet weighing approximately 20 lbs. per 100 sq. ft., and 100 lbs. of CAREY ASPHALT shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 9—Type C.

All felts used in the construction of this roof shall be 36 ins. wide. The roof surface shall first be covered with the 45-lb. Feltex Base Sheet, mopping this sheet not less than 2 ins. and securing it to the deck with 1-in nails driven through flat tin caps or 1-in. "Simplex" nails, spacing nails along the laps, approximately every 4 ins. In addition, two rows of nails shall be run parallel to the laps through the center of the sheet, nailing approximately 8 ins. apart and 12 ins. from either edge. To the surface thus provided, a solid mopping of CAREY ASPHALT shall be applied into which, while hot, shall be embedded three sheets of 20-lb. Fiberock, each sheet to overlap the previous sheet 25 ins., leaving 11 ins. exposed. Solid moppings of Asphalt shall be applied between the sheets so that at no point shall felt touch felt. The roof surface shall be finished with a uniform coating of hot CAREY ASPHALT. CAREY ASPHALT used in the construction of this roof shall not be heated over 400° F.

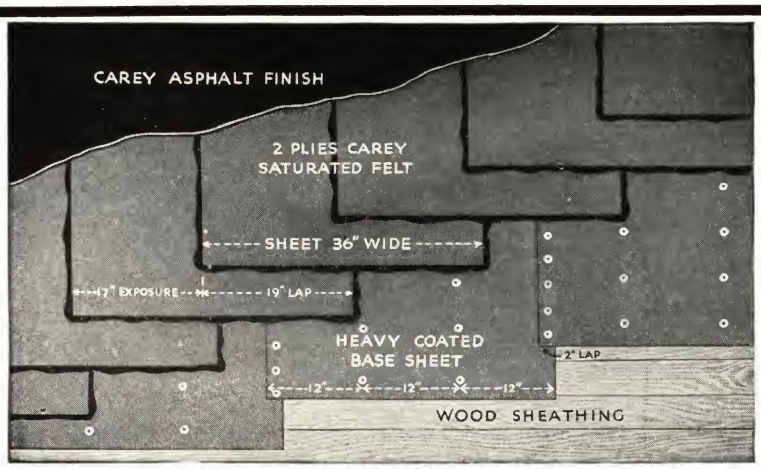
STEEP DECK APPLICATION

In applying either of the above specifications on deck having slope exceeding 2 ins. per foot, all sheets shall be run at right angles to slope of deck and nailed at a point 2 ins. from the back edge of each sheet, spacing nails on 8-in. centers.

Carey Steep Roofing Asphalt shall be used throughout.

BOND CLAUSE

The roofing contractor shall furnish THE PHILIP CAREY MANUFACTURING COMPANY'S 20-year Surety Bond covering both material and workmanship used in the construction of this roof, when same is applied strictly according to above specifications by a Carey Approved Roofer.



Carey 10-Year Master Built-up Roofing Specification No. 10

NUMBER **10**

Bond: 10-Year

DECK • WOOD or PRECAST GYPSUM

INCLINE • ¾-6 IN. per Foot

CONSTRUCTION • ASPHALT

SURFACE • ASPHALT

THREE OPTIONAL TYPES • and the Service Adaptability of Each

TYPE	Sections of U. S.	Deck Slope, inches to one foot	Acid Fumes		Underwriters Laboratories Rating	Number of Layers and Type of Felt	Weight, lbs. Base Sheet per square	Weight, lbs. per ply Cap Sheet per square	Type Mopping	Weight per square Asphalt Mopping
			Rec.	Not Rec.						
A	All	¾ to 6	X	.....	Class A	1 layer Carey Fiberock Base Sheet (Asphalt Impregnated Asb.) 2 plies Carey Fiberock (Asphalt Impregnated Asb.)	45	20	Carey Asphalt	75
B	North and East	¾ to 6	.....	X	Class C	1 layer Feltex Base Sheet (Asphalt Sat. Rag Felt) 2 plies Carey Feltex (Asphalt Sat. Rag Felt)	30	15	Carey Asphalt	75
C	North and East	¾ to 6	X	.....	Class C	1 layer Feltex Base Sheet (Asphalt Sat. Rag Felt) 2 plies Carey Fiberock (Asphalt Impregnated Asb.)	30	20	Carey Asphalt	75

DECK SURFACES

The roof deck over which this specification is to be applied shall be dry, free from rubbish and debris and free from objectionable low spots and depressions. Roof must be applied during dry, favorable weather.

GYPSUM DECKS

When this specification is applied over gypsum decks the length of the nails called for under "Application," shall be 1¾ ins. long instead of 1 in. long.

APPLICATION

TYPE A—Specification No. 10

One layer of Carey 45-lb. Fiberock Asbestos Base Sheet (Asphalt Impregnated and Coated Asbestos Felt), weighing approximately 45 lbs. per 108 sq. ft., and two plies of Carey 20-lb. Fiberock (Asbestos Felt Impregnated and Coated on one side with Asphalt), each sheet weighing approximately 20 lbs. per 100 sq. ft., and 75 lbs. of Carey Asphalt shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 10—Type A.

All felts used in the construction of this roof shall be 36 ins. wide. The roof surface shall first be covered with the 45-lb. Fiberock Base Sheet, lapping all sheets not less than 2 ins. and secured to the deck with 1-in. nails driven through flat tin caps or 1-in. "Simplex" nails, spacing nails along the laps approximately every 4 ins. In addition two rows of nails shall be run parallel to the laps through the center of the sheets, nailing approximately 8 ins. apart and 12 ins. from either edge. To the surface thus provided a solid mopping of Carey Asphalt shall be applied, into which, while hot, shall be embedded two sheets of Carey 20-lb. Fiberock, Asphalt coated side down, each sheet to overlap the previous sheet 19 ins., leaving 17 ins. exposed. Solid moppings of Asphalt shall be applied between the sheets so that at no point shall felt touch felt. The roof surface shall be finished with a uniform coating of hot Carey Asphalt. Carey Asphalt used in the construction of this roof shall not be heated over 400° F.

TYPE B—Specification No. 10

One layer of CAREY 30-LB. FELTEX BASE SHEET (Asphalt Saturated Rag Felt), weighing approximately 30 lbs. per 100 sq. ft., and two plies of CAREY 15-LB. FELTEX (Asphalt Saturated Rag Felt), each sheet weighing approximately 15 lbs. per 100 sq. ft., and 75 lbs. CAREY ASPHALT shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 10—Type B.

All felts used in the construction of this roof shall be 36 ins. wide. The roof surface shall first be covered with the 30-lb. Feltex Base Sheet, lapping all sheets not less than 2 ins. and secured to the deck with 1-in. nails driven through flat tin caps or 1-in. "Simplex" nails, spacing nails along the laps approximately every 4 ins. In addition two rows of nails shall be run parallel to the laps through the center of the sheets, nailing approximately 8 ins. apart and 12 ins. from either edge. To the surface thus provided a solid mopping of CAREY ASPHALT shall be applied into which, while hot, shall be embedded two sheets of 15-lb. Feltex, each sheet to overlap the previous sheet 19 ins., leaving 17 ins. exposed. Solid moppings of Asphalt shall be applied between the sheets so that at no point shall felt touch felt. The roof surface shall be finished with a uniform coating of hot CAREY ASPHALT. CAREY ASPHALT used in the construction of this roof shall not be heated over 400° F.

TYPE C—Specification No. 10

One layer of CAREY 30-LB. FELTEX BASE SHEET (Asphalt Saturated Rag Felt), weighing approximately 30 lbs. per 100 sq. ft., and two plies of CAREY 20-LB. FIBEROCK (Asbestos Felt Impregnated and Coated one side with Asphalt), each sheet weighing approximately 20 lbs. per sq. ft., and 75 lbs. of CAREY ASPHALT shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 10—Type C.

All felts used in the construction of this roof shall be 36 ins. wide. The roof surface shall first be covered with the 30-lb. Feltex Base Sheet, lapping all sheets not less than 2 ins. and secured to the deck with 1-in. nails driven through flat tin caps or 1-in. "Simplex" nails, spacing nails along the laps approximately every 4 ins. In addition two rows of nails shall be run parallel to the laps through the center of the sheets, nailed approximately 8 ins. apart and 12 ins. from either edge. To the surface thus provided a solid mopping of CAREY ASPHALT shall be applied, into which, while hot, shall be embedded two sheets of 20-lb. Fiberock, Asphalt coated side down, each sheet to overlap the previous sheet 19 ins., leaving 17 ins. exposed. Solid moppings of Asphalt shall be applied between the sheets so that at no point shall felt touch felt. The roof surface shall be finished with a uniform coating of hot CAREY ASPHALT. CAREY ASPHALT used in the construction of this roof shall not be heated over 400° F.

STEEP DECK APPLICATION

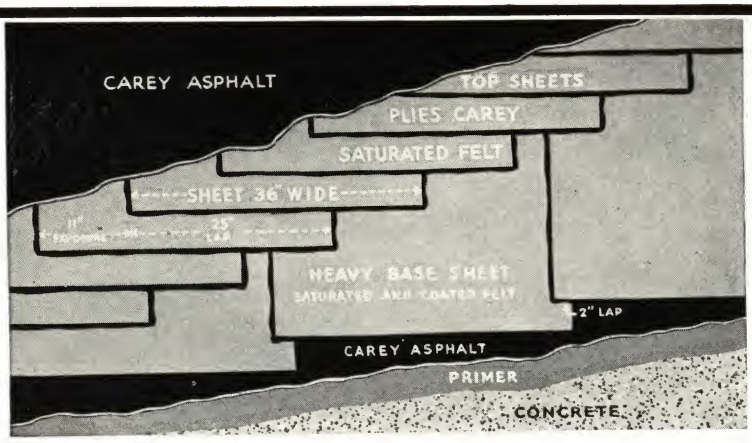
In applying any of the above specifications on deck having slope exceeding 2 ins. per foot, all sheets shall be run at right angles to slope of deck and nailed at a point 2 ins. from the back edge of each sheet, spacing nails on 8-in. centers.

Carey Steep Roofing Asphalt shall be used throughout.

BOND CLAUSE

The roofing contractor shall furnish THE PHILIP CAREY MANUFACTURING COMPANY'S 10-Year Surety Bond covering both material and workmanship used in the construction of this roof, when same is applied strictly according to above specifications by a Carey Approved Roofer.

The DeVilbiss Manufacturing Company — Toledo, Ohio



Carey 20-Year Master Built-up Roofing Specification No. 11

NUMBER **11**

Bond: 20-Year

DECK • CONCRETE STEEL POURED GYPSUM or INSULATED
INCLINE • ¾-1½ IN. per Foot
CONSTRUCTION • ASPHALT
SURFACE • ASPHALT

TWO OPTIONAL TYPES • and the Service Adaptability of Each

TYPE	Sections of U. S.	Deck Slope, inches to one foot	Acid Fumes		Underwriters Laboratories Rating	Number of Layers and Type of Felt	Weight, lbs. Base Sheet per square	Weight, lbs. per ply Cap Sheets per square	Type Mopping	Weight per square Asphalt Mopping	Asphalt Primer
			Rec.	Not Rec.							
A	All	¾ to 1½	X	.....	Class A	1 layer Carey Fiberock Base Sheet (Asphalt Impregnated Asb.) 2 plies Carey Fiberock (Asphalt Impregnated Asb.)	60	20	Carey Asphalt	115	1 Gal.
C	All	¾ to 1½	.....	X	Class A	4 plies Carey Fiberock (Asphalt Impregnated Asb. Felt)	.....	20	Carey Asphalt	140	1 Gal.

DECK SURFACES

Before Built-up Roofing is applied concrete or gypsum decks must be thoroughly dry with all low spots or depressions removed so that satisfactory drainage to outlets will result. Roof decks shall be free from frost, loose sand or debris and surface of decks shall also be free from laitance and scaling as the result of frozen mix.

Steel—Before roofing is applied all steel decks must first be covered with a layer of approved roof insulation at least ½ in. thick, said insulation to be bonded to steel deck with hot asphalt.

APPLICATION

TYPE A—Specification No. 11

One gallon Asphalt Primer, a base sheet of CAREY FIBEROCK (Asphalt Impregnated and Coated Asbestos Felt), weighing approximately 60 lbs. per 100 sq. ft., two plies of CAREY 20-LB. FIBEROCK (Asbestos Felt Impregnated and Coated on one side with Asphalt), each sheet weighing approximately 20 lbs. per 100 sq. ft., and 110 lbs. of CAREY ASPHALT shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 11—Type A.

All felts used in the construction of this roof shall be 36 ins. wide. The roof surface shall first be primed with Asphalt Primer to which surface shall be applied a heavy coat of Asphalt into which, while hot, shall be laid the CAREY 60-LB. FIBEROCK BASE SHEET, lapping all sheets not less than 2 ins. To the surface thus provided a solid mopping of CAREY ASPHALT shall be applied into which, while hot, shall be embedded two sheets of 20-lb. Fiberock, Asphalt coated side down, each sheet to overlap the previous sheet 19 ins., leaving 17 in. exposed. Solid moppings of Asphalt shall be applied between the sheets so that at no point shall felt touch felt. The roof surface shall be finished with a uniform coating of CAREY ASPHALT. CAREY ASPHALT used in the construction of this roof shall not be heated over 400° F.

TYPE C—Specification No. 11

One gallon Asphalt Primer, and four plies CAREY 20-LB. FIBEROCK ASBESTOS FELT Impregnated and coated on one side with Asphalt, each sheet weighing approximately 20 lbs. per 100 sq. ft. and 140 lbs. CAREY ASPHALT shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 11—Type C.

All felts used in the construction of this roof shall be 36 ins. wide. The roof surface shall first be primed with Asphalt Primer to which surface shall be applied a heavy coat of asphalt into which, while hot, shall be embedded four sheets of felt, each sheet to overlap the previous sheet 27 ins., leaving 9 ins. exposed. Solid moppings of Asphalt shall be applied between the sheets so that at no point shall felt touch felt. The roof surface shall be finished with a uniform coating of CAREY ASPHALT. CAREY ASPHALT used in constructing this roof shall not be heated over 400° F.

BOND CLAUSE

The roofing contractor shall furnish THE PHILIP CAREY MANUFACTURING COMPANY'S 20-Year Surety Bond covering both material and workmanship used in the construction of this roof, when same is applied strictly according to above specifications by a Carey Approved Roofer.

NUMBER

12

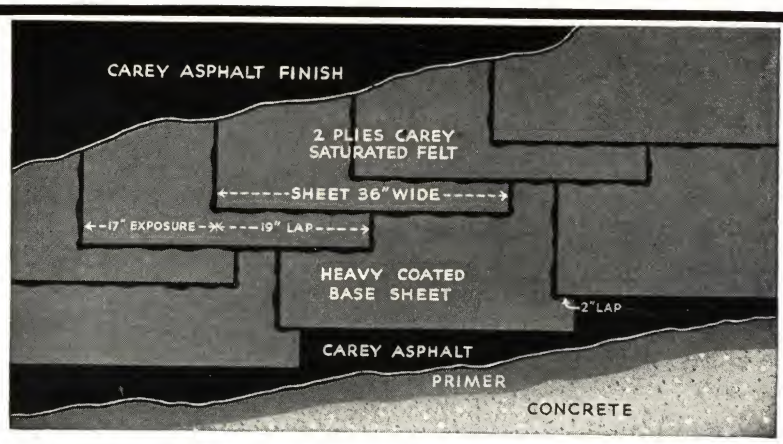
Bond: 10-Year

DECK • CONCRETE, STEEL, POURED GYPSUM or INSULATED

INCLINE • ¾-1½ IN. per Foot

CONSTRUCTION • ASPHALT

SURFACE • ASPHALT



Carey 10-Year Master Built-up Roofing Specifications No. 12

THREE OPTIONAL TYPES • and the Service Adaptability of Each

TYPE	Sections of U. S.	Deck Slope, inches to one foot	Acid Fumes		Underwriters Laboratories Rating	Number of Layers and Type of Felt	Weight, lbs. Base Sheet per square	Weight, lbs. per ply Cap Sheet per square	Type Mopping	Weight per square Asphalt Mopping	Asphalt Primer
			Rec.	Not Rec.							
A	All	¾ to 1½	X	.....	Class A	1 layer Carey Fiberock Base Sheet (Asphalt Impregnated Asb.) 2 plies Carey Fiberock (Asphalt Impregnated Asb.)	45	20	Carey Asphalt	115	1 Gal.
B	North and East	¾ to 1½	.....	X	Class C	1 layer Carey Feltex Base Sheet (Asphalt Sat. Rag Felt) 2 plies Carey Feltex (Asphalt Sat. Rag Felt)	30	15	Carey Asphalt	115	1 Gal.
C	North and East	¾ to 1½	X	.....	Class C	1 layer Carey Feltex Base Sheet (Asphalt Sat. Rag Felt) 2 plies Carey Fiberock (Asphalt Impregnated Asb.)	30	20	Carey Asphalt	115	1 Gal.

DECK SURFACES

Before Built-up Roofing is applied concrete or gypsum decks must be thoroughly dry with all low spots or depressions removed so that satisfactory drainage to outlets will result. Roof decks shall be free from frost, loose sand or debris and surface of deck shall also be free from laitance and scaling as the result of frozen mix.

Steel—Before roofing is applied all steel decks must first be covered with a layer of approved roof insulation at least ½ in. thick, said insulation to be bonded to steel deck with hot asphalt.

APPLICATION

TYPE A—Specification No. 12

One gallon Asphalt Primer, a base sheet of CAREY 45-LB. FIBEROCK (Asphalt Impregnated and Coated Asbestos Felt), weighing approximately 45 lbs. per 108 sq. ft., two plies of CAREY 20-LB. FIBEROCK (Asbestos Felt Impregnated and Coated on one side with Asphalt), each sheet weighing approximately 20 lbs. per 100 sq. ft., and 115 lbs. of CAREY ASPHALT shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 12—Type A.

All felts used in the construction of this roof shall be 36 ins. wide. The roof surface shall first be primed with Asphalt Primer to which surface shall be applied a heavy coat of Asphalt into which, while hot, shall be laid the CAREY 45-LB. FIBEROCK BASE SHEET, lapping all sheets not less than 2 ins. To the surface thus provided a solid mopping of CAREY ASPHALT shall be applied into which, while hot, shall be embedded two sheets of 20-lb. Fiberock, Asphalt coated side down, each sheet to overlap the previous sheet 19 ins., leaving 17 ins. exposed. Solid moppings of Asphalt shall be applied between the sheets so that at no point shall felt touch felt. The roof surface shall be finished with a uniform coating of CAREY ASPHALT. CAREY ASPHALT used in the construction of this roof shall not be heated over 400° F.

TYPE B—Specification No. 12

One gallon Asphalt Primer, a base sheet of CAREY FELTEX (Asphalt Saturated Rag Felt), weighing approximately 30 lbs. per 100 sq. ft., and two plies of CAREY 15-LB. FELTEX (Asphalt Saturated Rag Felt), each sheet weighing approximately 15 lbs. per 100 sq. ft., and 115 lbs. CAREY ASPHALT shall be used in constructing 100 sq. ft. of Carey Master Built-up Roofing Specification No. 12—Type B.

All felts used in the construction of this roof shall be 36 ins. wide. The roof surface shall first be primed with Asphalt Primer to which surface shall be applied a heavy coat of Asphalt into which, while hot, shall be laid the CAREY 30-LB. FELTEX Base Sheet, lapping all sheets not less than 2 ins. To the surface thus provided a solid mopping of CAREY ASPHALT shall be applied into which, while hot, shall be embedded two sheets of felt, each sheet to overlap the previous sheet 19 ins., leaving 17 ins. exposed. Solid moppings of Asphalt shall be applied between the sheets so that at no point shall felt touch felt. The roof surface shall be finished with a uniform coating of CAREY ASPHALT. CAREY ASPHALT used in constructing this roof shall not be heated over 400° F.

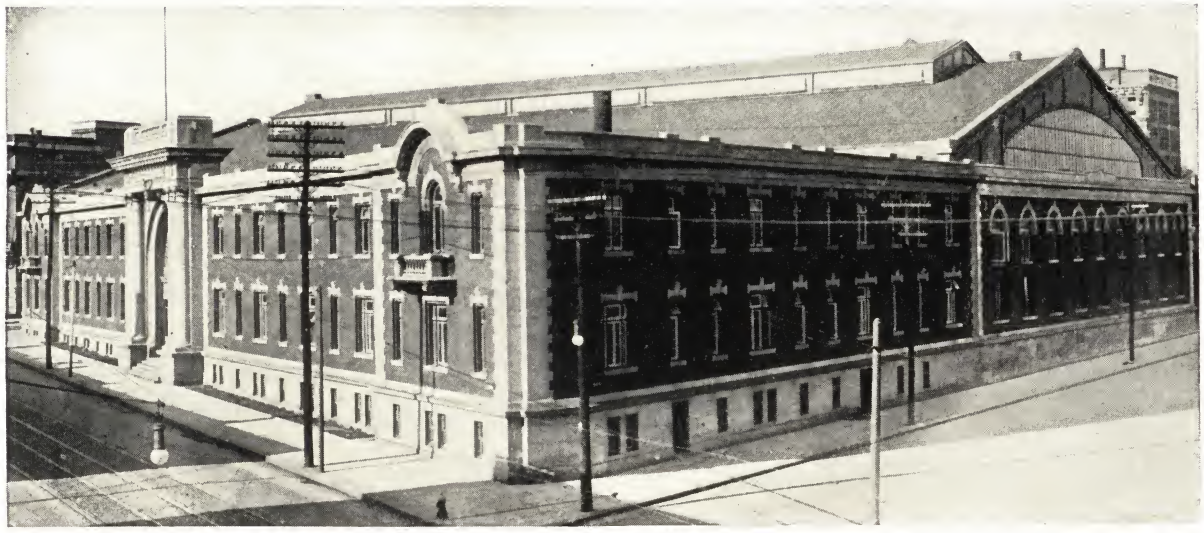
TYPE C—Specification No. 12

One gallon of Asphalt Primer, a base sheet of CAREY FELTEX (Asphalt Saturated Rag Felt), weighing approximately 30 lbs. per 100 sq. ft., and two plies of CAREY 20-LB. FIBEROCK (Asbestos Felt Impregnated and Coated on one side with Asphalt), each sheet weighing approximately 20 lbs. per 100 sq. ft., and 115 lbs. of CAREY ASPHALT shall be used in the construction of 100 sq. ft. of Carey Master Built-up Roofing Specification No. 12—Type C.

All felts used in the construction of the roof shall be 36 ins. wide. The roof surface shall first be primed with Asphalt Primer, to which surface shall be applied a heavy coat of Asphalt into which, while hot, shall be embedded the CAREY 30-LB. FELTEX Base Sheet, lapping all sheets not less than 2 ins. To the surface thus provided a solid mopping of CAREY ASPHALT shall be applied into which, while hot, shall be embedded two sheets of 20-lb. Fiberock, Asphalt coated side down, each sheet to overlap the previous sheet 19 ins., leaving 17 ins. exposed. Solid moppings of Asphalt shall be applied between the sheets so that at no point shall felt touch felt. The roof surface shall be finished with a uniform coating of Asphalt. CAREY ASPHALT used in the construction of this roof shall not be heated over 400° F.

BOND CLAUSE

The roofing contractor shall furnish THE PHILIP CAREY MANUFACTURING COMPANY'S 10-Year Surety Bond covering both material and workmanship used in the construction of this roof, where same is applied strictly according to above specifications by a Carey Approved Roofer.



Armory Drill Shed, 33rd and Lancaster Ave. Philadelphia, Pa.

ROOF INSULATION

For Application Over Wood, Concrete and Steel Decks

The following Carey Master Built-up Roofing Specifications are especially adapted for application over insulated wood, concrete and steel decks (asphalt primer called for in roofing specifications to be omitted unless called for in the insulation specification):

(1) 20-year Slag or Gravel surfaced: All types called for under Carey Master Built-up Roofing Specification No. 3.

(2) 10-year Slag or Gravel surfaced: All types called for under Carey Master Built-up Roofing Specification No. 4.

(3) 20-year Dur-A-Seal Mineral Surfaced: All types called for under Carey Master Built-up Roofing Specification No. 7.

(4) 10-year Dur-A-Seal Mineral Surfaced: All types called for under Carey Master Built-up Roofing Specification No. 8.

(5) 20-year smooth Asphalt finished: All types called for under Carey Master Built-up Roofing Specification No. 11.

(6) 10-year smooth Asphalt finished: All types called for under Carey Master Built-up Roofing Specification No. 12.

GENERAL REQUIREMENTS

When smooth top Asphalt finished roofs, Dur-A-Seal Mineral surfaced roofs or any other type roof not surfaced with Slag or Gravel, is specified for application over insulated poured or pre-cast concrete decks, the deck shall be primed with a coat of cold Asphalt Primer, using approximately one gallon per 100 sq. ft., before the first mopping of Asphalt, which is to bond the insulation in place, is applied.

Bitumen required for application of roof insulation shall be in addition to the total quantity specified for use in applying the built-up roofing specification.

The roof deck shall be acceptable to the roofing contractor and shall be thoroughly clean, dry and otherwise conform to the accepted standard of deck construction providing a suitable surface over which to apply a built-up roof.

At the end of each day's work the exposed edges of the insulation shall be protected from the elements with a strip of 15-lb. Saturated Felt bonded to the deck and extended over exposed edges of insulation with a mopping of hot Bitumen.

The application of the built-up roof shall follow closely the application of the insulation and at no time shall the built-up roof be applied when the surface of the insulation is moist or damp.

SPECIAL CONSTRUCTION RECOMMENDATIONS

The constructions recommended in this note, while not a part of this insulation specification, are suggested for use on jobs where improved construction is desired at small additional cost.

(A) Concrete Decks—A mopping of hot Bitumen and a layer of 15-lb. Saturated Felt applied to the deck before insulation is applied provides a better base and a dryer bonding surface for the insulation than otherwise would be provided if insulation was applied directly over the concrete.

(B) Water Stops—When insulation is applied to all types of decks it may be divided into sections by means of water stops or seal courses consisting of strips of 15-lb. Saturated Felt approximately 10½ ins. wide. One half the width of a Saturated Felt strip is bonded to the deck with hot Bitumen, the other half is extended over the edges and on to the surface of the insulation and secured to same with a mopping of hot Bitumen.

These water stops or seal courses should be placed at intervals of approximately 30 feet in both directions and at all outside edges of insulation, thereby preventing the danger of water from possible leaks traveling from one section of the insulation to another.

SPECIFICATION FOR INSULATED WOOD DECKS

The wood deck shall first be covered with two layers of Red Rosin Sized Sheathing Paper weighing approximately 5 lbs. per 100 sq. ft. Sheets shall be lapped approximately 19 ins. at the side and end laps and secured to the deck by occasional nailing. Over this surface a layer of approved insulation shall be applied strictly according to architect's or manufacturer's specifications and secured to the deck with large headed roofing nails. (If additional layers of roof insulation are specified, joints between each subsequent layer shall be broken and layers of insulation shall be bonded together and firmly embedded into a solid mopping of hot Bitumen.) Over the surface of the applied insulation the built-up roof, type as specified, shall be applied.

All Bitumen used in applying insulation shall be of the same type as is used in the construction of the built-up roof.

SPECIFICATION FOR INSULATED CONCRETE DECKS

The concrete deck shall first be covered with a solid mopping of hot Bitumen. (When Asphalt roofs are specified which are not to be surfaced with Slag or Gravel the deck shall be primed before the mopping of hot Asphalt is applied.) Into the solid mopping of Bitumen, while hot, shall be firmly embedded a layer of approved roof insulation applied strictly according to architect's or manufacturer's specifications. (If additional layers of roof insulation are specified, joints between each subsequent layer shall be broken and layers of insulation shall be bonded together and firmly embedded into a solid mopping of hot Bitumen.) Over the surface of the applied insulation the built-up roof, type as specified, shall be applied.

All Bitumen used in applying insulation shall be of the same type as is used in the construction of the built-up roof.

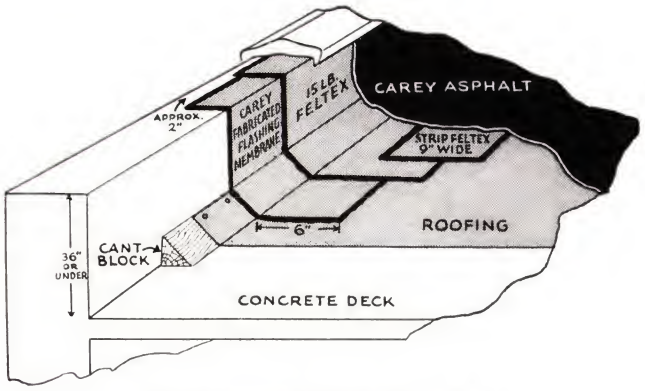
SPECIFICATION FOR INSULATED STEEL DECKS

Sections of the steel deck formed in sheets shall provide rigidity and strength and not be subject to excessive deflection. Steel deck shall be free from perforations which will allow hot Bitumen to drip through the deck and shall be free from bolt heads, purlin clips and insulation cleats and other objectionable projections. Deck and fixtures shall have a shop coat of paint. Roofing specifications constructed of Coal Tar Pitch are not recommended for application over steel deck construction.

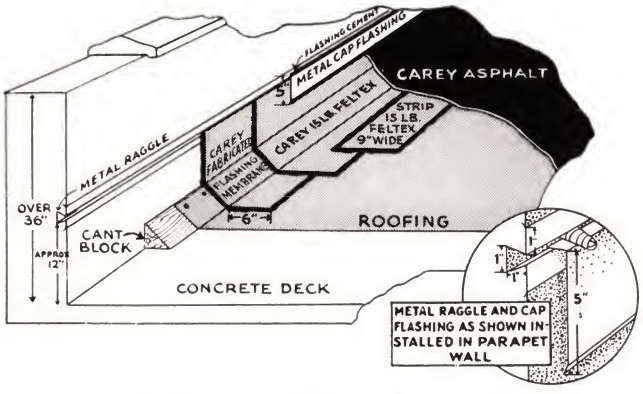
The steel deck shall first be covered with a solid mopping of Asphalt into which, while hot, shall be firmly embedded a layer of approved roof insulation applied strictly according to architect's or manufacturer's specifications. On roof decks having an incline exceeding ¾ in. in 12 ins. insulation shall be secured in place with metal clips or bolts in addition to the bond provided by the Asphalt. (If additional layers of roof insulation are specified, joints between each subsequent layer shall be broken and layers of insulation shall be bonded together and firmly embedded into a solid mopping of hot Asphalt.)

All Asphalt used in the application of insulation for bonding roofing to the surface of the insulation, when applied over steel deck, shall have a minimum melting point of 190° F. Over the surface of the applied insulation the built-up roof, type as specified, shall be applied.

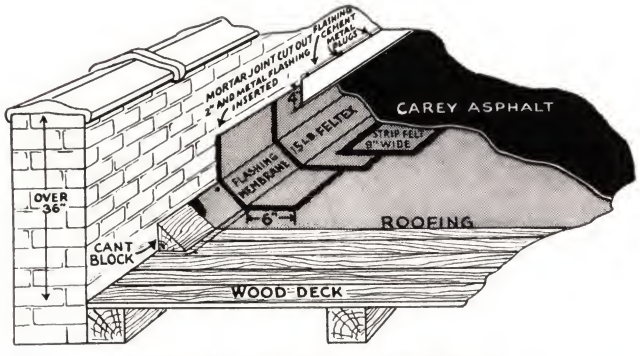
CAREY BONDED FLASHING DETAILS • 10-Year



Carey Approved Flashing Detail No. 1
Recommended for use on brick or concrete parapet walls not exceeding 36 in. in height, on which coping is to be applied



Carey Approved Flashing Detail No. 2
Recommended for use on concrete parapet walls exceeding 36 in. in height



Carey Approved Flashing Detail No. 3
Recommended for use on brick parapet walls exceeding 36 in. in height

The three flashing details shown at the left are adaptable to new or replacement work and may be modified to meet almost any unusual condition. The methods of installation are clearly indicated. The text below describes the materials used in the flashing and the laying of the sheets over the wood cant strip.

Carey Fabricated Flashing Membrane

A two-ply preformed Fabricated Flashing Membrane consisting of laminations of Waterproofed Cotton Fabric and Feltex, bonded together at the factory with an especially blended and refined asphalt.

Weight of sheet per 100 sq. ft.....Approx. 32 lbs.
Stretch before fracture.....Approx. 10%
Mullen test for tensile strength
against felt side of Membrane...Approx. 190 lbs.

On account of the elasticity, stretch, strength and extreme flexibility of this material it will conform readily and bond securely with hot asphalt to parapet walls, angles and corners, thus tending to eliminate all danger of cracks and breaks found in ordinary flashing material as the result of misuse, movement in the roof deck or settling of the building.

Wood Cant Strip

Wood cant strip shall be constructed out of a diagonal half of a 4x4 which shall be placed securely in the angle of the wall and cemented in place with a mopping of hot asphalt on hard surfaced decks or toe nailed at the lower edge of the cant strip on wood decks.

The heavy base sheet and all top sheets of the built-up roof shall extend to the top edge of the wood cant strip and be secured in place with nails driven through flat tin caps, after which a 12-in. strip of Carey Fabricated Flashing Membrane shall be laid parallel with the cant strip extending 3 ins. up on the vertical side of the parapet wall and approximately 3½ ins. out on the roof and secured in place with a mopping of hot asphalt.

The rest of the flashing construction shall be installed in accordance with Carey Approved Flashing Details Nos. (1) (2) (3).

Alternate—Plastic Flashings

As an alternate construction it will be satisfactory to substitute Carey Flashing Cement in place of hot Asphalt as the bonding material on the above Flashing constructions.

On those details where metal Counter Flashings are specified, if Carey Flashing Cement is used as the bonding material, it will be satisfactory to use as a Counter Flashing over the top edge of the base Flashing a four inch wide strip of saturated cotton fabric laid in Carey Flashing Cement and trowel coated with same material.

MASTER SPECIFICATIONS

Carey BUILT-UP ROOFS

BONDED 5·10·20 YEARS